

# REMOVAL AND FINAL STATUS SURVEY OF HISTORIC AVENUE "N" WOOD STAVE PIPE

NAVAL STATION TREASURE ISLAND, SAN FRANCISCO, CALIFORNIA

> BCT Meeting January 20, 2016

# **Site History**



According to the *Final Historical Radiological Assessment – Supplemental Technical Memorandum* (2014), the storm and sewer lines downstream of former Building 233 were identified as radiologically impacted due to the potential for disposal of radium-226 (<sup>226</sup>Ra) down these lines during the decontamination of Building 233 due to a radium spill in 1950:

- While existing storm lines have been investigated, the Navy confirmed the existence of a 30" wood stave pipe that was abandoned in place in the 1970s
- Upstream sections were removed, and the original outfall was removed and replaced with the current structure.

As a result, the pipe, filling material used to abandon the pipe in place, and surrounding soil (within 1 foot of the pipe) require investigation to characterize/remediate <sup>226</sup>Ra contamination (if present).

# **Project Scope and Objectives**



The scope and objectives of field work includes:

- Installing the 16" and 4" bypass lines.
- Removing existing swale and overburden material.
- Locating and excavating the wood stave storm line and surrounding soil, characterizing for radiological contamination.
- Conducting radiological surveys on excavated soil in accordance with MARSSIM, as applicable, to support radiological characterization and free release of the project area.
  - \*\* Results of the surveys and data evaluation will be reported in a Final Status Survey Report and gain concurrence from regulatory agencies on the findings and conclusions of the surveys.
- Backfilling the excavation and reconstructing the swale to match current conditions.

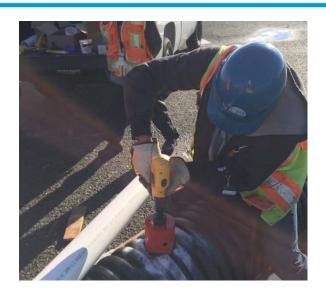


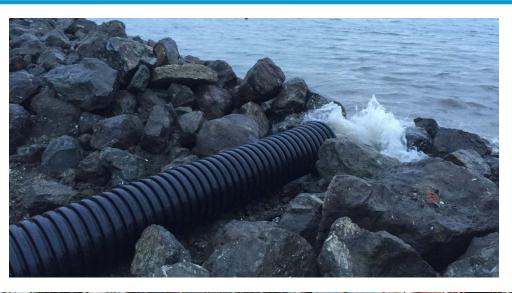
- Mobilized to the site on December 7, 2015.
- Initial topographic and geophysical survey, and site set up were completed week end December 11, 2015.
- Traffic controls (detour routes) were installed week end December 11, 2015 and will remain in place until the end of the project (February 2016).
- Completed the installation of the 4" and 16" bypass line on January 7, 2016.













Installation and operation of the 4" and 16" bypass lines

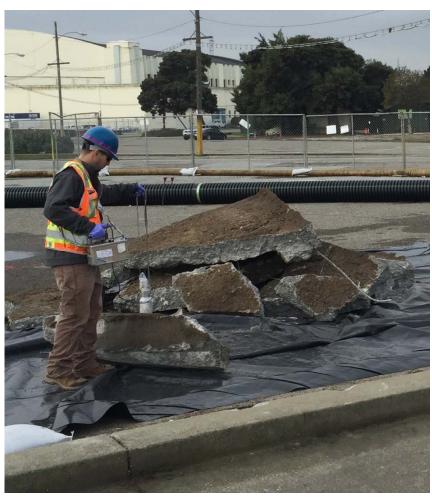


- Completed removing concrete on the western and eastern most ends of the swale on January 12, 2016.
- Began excavating material beneath the concrete swale on January 12, 2016 in the western end of the excavation
  - Approximately 22 cubic yards has been removed from the excavation.
  - Excavated overburden material has been gamma scanned with results below screening criteria, as expected.
- Plan to excavate and locate the pipe at the eastern and westernmost ends of the swale to get a straight-line location of the pipe on the site.
  - Will characterize these locations as well as the pipe and its surrounding and fill material for potential radiological contamination.



\*\*The only concrete/soil that will remain in place is the soil and concrete 15 feet on either side of the high volt lines running across the excavation





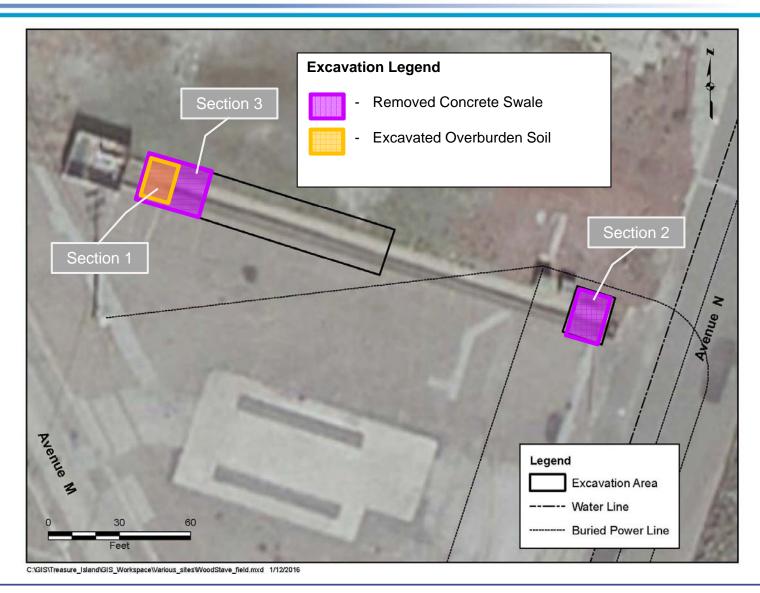
RAD Gamma scan of the underside of the concrete removed prior to stockpiling.



Uncovering unknown utilities to confirm if in use or abandoned.

#### **Current Status of Work – Excavation**

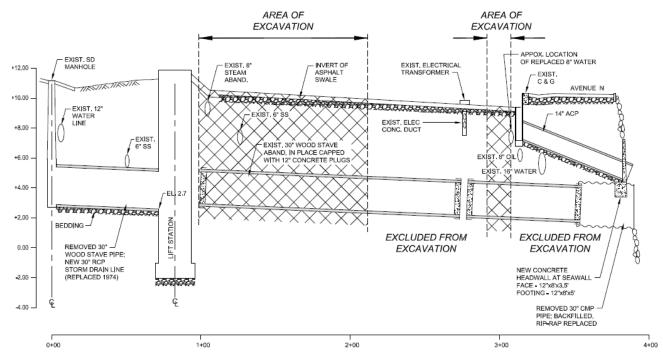




### **Upcoming Work**

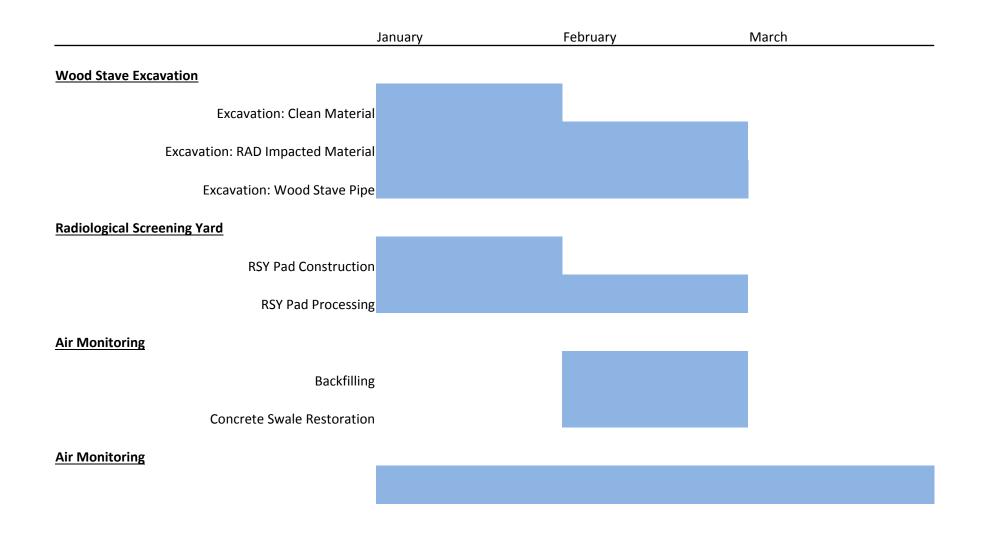


- Complete the construction of the new RSY Pad north of the swale (RSY Pad 233A)
- Complete the excavation of the top 4' of material from the eastern most section of the excavation area (Section 2)
- Locate the wood stave pipeline within the excavated areas (Sections 1 and 2)
- Characterize the wood stave pipe, its contents, and the surrounding soil (at least 1' around the pipe in all directions) for potential radiological contamination



# Activity Schedule – 3 Month Look Ahead









# **Additional Photos**





RAD Gamma scan of the top 4 feet of soil in stockpile. Scans have been below screening criteria. Soil is used to create berm for temporary clean soil stockpile.





Investigating unknown utility confirmed to be abandoned ductile iron pipe in west end of excavation. In process gamma scan prior to removal.